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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,312	08/26/2003	Mei Hua Chiang	FP9642	2024

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EXAMINER

HUSBAND, SARAH E

ART UNIT PAPER NUMBER

1746

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,312

Applicant(s)

CHIANG, MEI HUA

Examiner

Sarah E. Husband

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species I in the reply filed on 7/19/2006 is acknowledged.

Specification

The disclosure is objected to because of the following informalities: page 7, line 4 states "hole 141" and should be "hole 131" as it is referring to the previous embodiment; page 7, line 8 states "hole 141" and should be "hole 411" because it is referring to Fig. 1C.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Keiun (US Patent No. 4,418,654).

Keiun discloses a fuel supplement supplying device for an internal combustion engine. Keiun describes one of these fuels as water (col. 3, ll. 35-45). Keiun also discloses the air inlet and the air passageway (1). Keiun further discloses a smaller diameter venturi section (suction generation) (20) in the air passageway and a pipe, which connects the fluid source to a hole ending in a head, which is connected to the air passageway (2 and 4). Keiun also discloses the connection of the suction generator and air inlet. The pipe delivers

fluid to the head structure, which releases fluid in response to the suction force. Keiun also describes the various positions of the suction hole as in the air inlet and air passage (Fig. 7 and 8). (See entire document as well)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolters (US Patent 6,523,528) in view of Chang (US 6,584,993).

Wolters discloses an internal combustion engine and an air inlet arrangement, which contains a venturi air passageway (Fig. 1, Items 6 and 7; col. 3). The venturi provides the increased air speed because of its smaller diameter. Wolters also discloses the hole into the venturi where fluid can enter (9). Wolters does not specifically disclose cleaning the area. Chang discloses a device for cleaning internal combustion engines having a fluid guiding tube, which brings fluid into the air inlet as a result of the suction from the engine (see entire document; Fig. 2, Items 60, 87, 80). This tube is connected to the air inlet. Chang also discloses the necessity of cleaning the engines due to the carbon buildup, which results in increased efficiency and a longer life (col. 1, ll. 12-25). Chang does not specifically disclose the various locations of the entrance of the cleaning fluid, however, one of ordinary skill in the art would foresee the different placements of the tube as the Courts have upheld that the

rearrangement of parts is obvious, *In re Japikse* 86 USPQ 70 (CCPA 1950). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Wolters with Chang for the known benefit of removing carbon deposits to provide a more efficient and longer lasting engine.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keiun.

Keiun discloses the device shown above in the 102(b) rejection. Keiun does not specifically disclose the suction hole in the lateral side of the throat. However, Keiun does disclose the suction hole in a variety of other positions and therefore it would have been obvious to one of ordinary skill to position the hole in this location as well. The Courts have ruled that the relocation of parts is obvious, *In re Japikse* 86 USPQ 70 (CCPA 1950).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not disclosed are Adair (US 2431679), Saele (US 4249922), Davis (US 1685598), Beck (US 20040006978), Glew (US 20030134933), Shelton, (US 3973916), Sasaki (US 5970884), Wells (US 6178977), Kirmss (US 3875922), Mellqvist (US 4076002), Gatzke (US 6830630), Vallerie (US 2366073), Bird (US 1565778), who disclose venturi type air inlets and/or engine cleaning devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah E. Husband whose telephone number is (571) 272-8387. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEH


MICHAEL BARR
SUPERVISORY PATENT EXAMINER